# Claims

1. A method of processing an edge of a substrate, comprising:

supporting the substrate by an edge roller, the edge roller including a proximity head;

forming a meniscus inside a concave portion of the proximity head, the concave portion being capable of receiving at least a portion of an edge of the substrate; and

moving the meniscus onto the edge of the substrate.

2. The method of claim 1, further comprising moving the meniscus off of the edge of the substrate.

3. The method of claim 1, wherein moving the meniscus onto the edge of the substrate includes rotating the proximity head about an axis of the proximity head.

4. The method of claim 1, wherein moving the meniscus onto the edge of the substrate includes moving the meniscus relative to the edge of the substrate.

5. The method of claim 1, wherein moving the meniscus includes increasing the size of the meniscus.

6. The method of claim 1, wherein the edge of the substrate includes a circumferential edge of the substrate and the meniscus encompasses at least a portion of the circumference of the substrate.

7. The method of claim 1, wherein the meniscus encompasses the edge of the substrate within the portion of the circumference of the substrate.

8. The method of claim 7, wherein the meniscus encompasses at least one of a top surface edge exclusion zone and a bottom surface edge exclusion zone.

9. The method of claim 1, further comprising moving the meniscus along the edge of the substrate.

10. A system for processing an edge of a substrate comprising:

an edge roller;

a first proximity head mounted on the edge roller, the first proximity head capable of forming a meniscus, the first proximity head including:

a concave portion, the concave portion capable of receiving an edge of a substrate; and

a plurality of ports opening into the concave portion, the plurality of ports including:

at least one process liquid injection port;

at least one vacuum port; and

at least one surface tension control port.

11. The system of claim 10, wherein the edge of the substrate includes a circumferential edge of the substrate and the first proximity head is capable of forming a meniscus capable of covering at least a portion of the circumference of the substrate.

12. The system of claim 10, wherein the edge roller is mounted on a first axis and the first proximity head is mounted on a second axis.

13. The system of claim 12, wherein the first axis and the second axis are concentric.

14. The system of claim 12, wherein the first axis and the second axis can be rotated independently.

15. The system of claim 10, further comprising a second proximity head.

16. The system of claim 15, wherein the edge of the substrate includes a circumferential edge and wherein the first proximity head and the second proximity head are capable of being positioned over the circumferential edge.

17. The system of claim 16, wherein the first proximity head and the second proximity head are capable of being independently positioned over the circumferential edge.

18. The system of claim 16, wherein the first proximity head is capable of locating a first meniscus on the edge of the substrate before the edge of the substrate contacts the edge roller and the second proximity head is capable of locating a second meniscus on the edge of the substrate after the edge of the substrate contacts the edge roller.

19. The system of claim 10, further comprising an actuator coupled to the first proximity head, the actuator capable of moving the first proximity head.

20. A system for processing an edge of a substrate comprising:

an edge roller mounted on a first axis;

a first proximity head mounted on a second axis, the second axis being concentric with the first axis, the first proximity head capable of forming a meniscus, the first proximity head including:

a concave portion, the concave portion capable of receiving an edge of a substrate; and

a plurality of ports opening into the concave portion, the plurality of ports including:

at least one process liquid injection port;

at least one vacuum port; and

at least one surface tension control port; and

an actuator coupled to the second axis, the actuator capable of moving the second axis the axis capable of being rotated independently from the first axis.